

## APPENDIX B - METHODS AND ASSUMPTIONS

Below is a description of the key methods and assumptions used for the derivation of the Demographic Adjustment as well as the basic BLI calculations. The methods and assumptions utilized in developing the other Adjustments are sufficiently documented in Section III.

### Demographic Adjustment

The three adjustments making up the Demographic Adjustment were developed by calculating and comparing SFAS 106 costs for sample populations incorporating the GNP and TELCO demographic characteristics based on the age and service distribution of GNP and TELCO employees respectively. The calculations utilized pre- and post-65 per capita claim amounts that bear the same relationships to each other as do the pre- and post-65 BLIs for GNP and TELCO. All assumptions other than withdrawal, and retirement age (already discussed) were as follows:

discount rate - 8.13%  
trend rate - 10.08% in 1991 decreasing gradually to 5.56% for the year  
2006 and later  
retirement eligibility - 55  
amortization period for transition obligation - 20 years  
percent married - 65%

### BLI Calculations

The calculation of individual plan Benefit Level Indicators used the following data and methods.

A data base of annual claim amount distributions was used, based on the experience of 39,436 retirees who participate in employer sponsored post-retirement medical programs administered by a large national insurance company. For pre- and post-65 claimants, frequency weights, monetary weights, hospital/

drug/other ratios and Medicare reimbursements by type were developed. This data base has 35 claim ranges with average claim amounts in each range from \$15 to \$48,753.

The calculations also used our data base of the post-retirement medical plan provisions for 830 private sector employers. For both comprehensive and base plus plans the following data items were available;

- ° hospital room and board, either as days covered or a percentage
- ° surgical coverage
- ° in-patient physician coverage
- ° out-patient physician coverage
- ° diagnostic coverage
- ° prescription drug coverage, either percentage or flat dollar co-pay
- ° major medical deductibles
- ° major medical co-pay percentage
- ° out-of-pocket maximums
- ° annual/lifetime maximums
- ° Medicare integration method (i.e., carve-out, supplement or coordination of benefits)
- ° participant and dependent contribution rates

These provisions are available separately for pre- and post-65 claimants.

A particular plan's gross BLI was computed by determining how much the plan would reimburse at each claim amount in the distribution data base. The reimbursement amount was determined separately for each type of charge; e.g., hospital, drug, etc. Medicare reimbursement was taken into account explicitly for each type of charge based on the form of Medicare integration in the plan. Each reimbursement was then divided by the corresponding claim to obtain a reimbursement ratio. These ratios were then weighted by the claim amount weights in the distribution to determine the gross BLI.

Per retiree contribution rates were then compared to per retiree claim amounts, and that ratio was used as an offset to the gross BLI to determine the final net pre- and post-65 BLIs for each company in the data base.

After average pre- and post-65 BLIs had been determined for GNP and TELCO (see Section III page 11 for methodology), pre- and post-65 weightings were calculated as the percentages of total SFAS 106 cost associated with pre- and post-65 claims, determined using the same methodology as for the Demographic Adjustment. These were then applied to the pre- and post-65 BLIs to develop GNP BLI and TELCO BLI.

By way of illustration, suppose a comprehensive plan pays 80% after a \$200 deductible, subject to an out-of-pocket maximum of \$1,500. After 65, Medicare integration is 'Supplement'. Participants contribute \$10 per month.

In the \$4,000 - \$5,000 claim range, for example, we find the average claim to be \$4,479. Since this is a comprehensive plan, we derive the pre-65 reimbursement utilizing the total claim amount, that is  $(4,479 - 200)$  times 80%, or \$3,423. The out-of-pocket maximum has not been met. Therefore, the pre-65 reimbursement ratio in the charge range is 0.7642. The ratios for all ranges are averaged using weights given by the distribution table to determine the gross pre-65 BLI.

The post-65 reimbursement recognizes Medicare integration, in this example the method is Medicare Supplement. We determine the breakdown of charges to be \$1,776 for hospital, \$567 for prescription drugs, and \$2,136 for all other charges. Total Medicare reimbursement is \$2,047 (calculated explicitly from

Medicare provisions) and is immediately taken out; in this case \$1,177 from hospital, \$870 from other medical charges and nothing from drug charges. The plan provisions are then applied to the balance of \$2,432, giving a plan reimbursement of \$1,786  $((2,432 - 200) \text{ times } 80\%)$ . This produces a post-65 reimbursement ratio of 0.3987 for this claim range. As with the pre-65 case the ratios for all ranges are then averaged using weights given by the distribution table to determine the gross post-65 BLI.

The gross BLIs are then adjusted to reflect participant contributions. Our example here might produce gross BLIs of 0.85 pre-65 and 0.32 post-65. The participant contribution of \$10 per month translates into a reduction in the gross BLIs of 0.03 pre-65 and 0.04 post-65, giving final BLIs of 0.82 and 0.28 respectively.

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## Appendix C

## Part I: Derivation of the Model

## I. Households

All households are assumed to be identical and obtain utility from money and leisure as well as each of the  $m$  produced goods. Each household solves the following maximization problem

$$(A1) \quad U^* = \max_{(C_i, M, N)} \{ C^\gamma (M/P)^{1-\gamma} \cdot (\phi N^{\eta+1})^{1/\eta} \}$$

subject to the constraint that

$$(A2) \quad M + \sum_i P_i C_i = I$$

where

$$(A3) \quad C = (\sum_i \alpha_i C_i^{(\theta-1)/\theta})^{\theta/(\theta-1)}$$

$$(A4) \quad P = (\sum_i \alpha_i P_i^{1-\theta})^{1/(1-\theta)}$$

and  $C_i$  is the consumption of produced good  $i$ ,  $P_i$  is the nominal price of produced good  $i$ ,  $M$  is the amount of money held at the end of the period,  $N$  is the amount of labor supplied,  $I$  is the total nominal value of resources available to the household,  $C$  is the bundle of consumption goods defined by the aggregator function in (A3), and  $P$  is a price index defined in (A4). (Note that the price index  $P$  in (A4) is not the fixed-weight GNP price index. The solution of the model produces prices for each of the  $m$  goods which can then be combined to calculate the appropriate fixed-weight GNP price index.) The parameters of the utility function are  $\gamma$ , which equals the share of the household's nominal expenditure on produced goods rather than on money balances;  $\theta$ , which is the elasticity of substitution between the consumption of any pair of goods;  $\alpha_i$ ,  $i = 1, \dots, m$ , which indicate the weight of each good in the household's utility function;  $\eta$ , which is the elasticity of labor supply; and  $\phi$  which characterizes the degree of disutility of labor.

The utility function in equation (A1) is additively separable between  $(C_i, M)$  and  $N$ . This separability allows us to solve the household's maximization problem in two stages. First, we will maximize utility with respect to  $C_i$  and  $M$ , and then we will choose the utility-maximizing level of labor supply  $N$ . Choosing  $C_i$  and  $M$  to maximize the utility function in (A1) subject to the constraint in (A2) yields the following first-order conditions:

$$(A5) \quad \alpha_i C_i^{-1/\theta} \gamma C^{\gamma-1+1/\theta} (M/P)^{1-\gamma} = \mu P_i$$

$$(A6) \quad (1-\gamma) C^\gamma (M/P)^{-\gamma} / P = \mu$$

where  $\mu$  is the Lagrange multiplier on the constraint (A2).

Combining the first-order conditions (A5) and (A6) yields

$$(A7) \quad \alpha_1 C_1^{-1/\theta} \gamma C^{(1-\theta)/\theta} M = (1-\gamma) P_1$$

Multiplying both sides of (A7) by  $C_1$  and then summing over all  $i$  yields

$$(A8) \quad \sum_i P_i C_i = (\gamma/(1-\gamma)) M$$

Substituting (A8) into (A2) yields

$$(A9) \quad M = (1-\gamma)I$$

Substituting (A9) into (A7), summing over all  $i$ , and using the definition of the price index in (A4) yields

$$(A10) \quad PC = \gamma I$$

Substituting (A9) into (A7) and then using (A10) yields the demand for good  $i$

$$(A11) \quad C_i = \alpha_i^\theta (P_i/P)^{-\theta} \gamma I/P$$

Substituting (A9) into (A11) yields

$$(A12) \quad C_i = \alpha_i^\theta (P_i/P)^{-\theta} (\gamma/(1-\gamma)) M/P$$

Having solved for the optimal values of  $C_i$  and  $M$ , we now solve for the optimal value of labor supply  $N$ . First, substitute the optimal values of  $C_i$  (eq. A11) and  $M$  (eq. A9) into the utility function in (A1) to obtain

$$(A13) \quad U^* = \max_N (\gamma^\gamma (1-\gamma)^{1-\gamma} (I/P) - (\phi N^{\eta+1})^{1/\eta})$$

subject to  $I = wN + rK^* + M + \pi$ , where  $\pi$  is the (present value of) post-retirement health benefits to be received by the household.

The first-order condition for labor supply  $N$  is

$$(A14) \quad \gamma^\gamma (1-\gamma)^{1-\gamma} (w/P) = ((\eta+1)/\eta) (\phi N)^{1/\eta}$$

which can be solved to obtain  $N^*$ , the optimal amount of labor supplied

$$(A15) \quad N^* = \nu (w/P)^\eta$$

where  $\nu = [\gamma^\gamma (1-\gamma)^{1-\gamma} \eta / (\eta+1)]^\eta \phi^{-1}$

## II. Firms

Each of the  $m$  goods is produced by competitive firms with Cobb-Douglas production functions. The total production of good  $i$ ,  $Y_i$ , is given by the production function

$$(A16) \quad Y_i = A_i N_i^{\rho_i} K_i^{1-\rho_i} \quad i = 1, \dots, m$$

The firms are assumed to be competitive and thus take the nominal price of their output,  $P_i$ , the nominal rental price of capital,  $r$ , and the nominal price of labor,  $D_i w$ , as fixed. Note that the nominal price of labor consists of two parts:  $w$  reflects the nominal wage rate excluding the cost of post-retirement health benefits covered by FAS 106. The factor  $D_i$  reflects the impact on the cost per unit of labor of post-retirement health benefits covered by FAS 106. For firms that do not offer post-retirement health benefits,  $D_i = 1$ . For firms that offer such benefits,  $D_i > 1$ . Competitive firms choose  $N_i$  and  $K_i$  to maximize

$$(A17) \quad P_i A_i N_i^{\rho_i} K_i^{1-\rho_i} - w D_i N_i - r K_i \quad i = 1, \dots, m$$

The first-order conditions for labor and capital are

$$(A18) \quad \rho_i P_i Y_i / N_i = w D_i \quad i = 1, \dots, m$$

$$(A19) \quad (1-\rho_i) P_i Y_i / K_i = r \quad i = 1, \dots, m$$

Given the nominal wage  $w$  and the FAS 106 factor  $D_i$ , (A18) determines the amount of labor demanded in sector  $i$ ; given the rental price of capital, (A19) determines the amount of capital demanded in sector  $i$ .

## III. Market Equilibrium

Equilibrium in the factor markets requires that the aggregate amount of labor demanded equal the supply of labor and the aggregate amount of capital demanded equal the supply of capital:

$$(A20) \quad \sum_i N_i = N^*$$

$$(A21) \quad \sum_i K_i = K^*$$

The amount of money demanded equals the amount initially held by consumers

$$(A22) \quad M = M^*$$

The amount of good  $i$  produced must equal the amount of good  $i$  demanded, so that using (A12) we obtain

$$(A23) \quad Y_i = \alpha_i^\theta (P_i/P)^{-\theta} (\gamma/(1-\gamma)) M/P$$

The nominal value of production must equal the nominal value of total factor payments, including the (present value of the) cost of post-retirement health benefits,

$$(A24) \quad \sum_1 P_1 Y_1 = rK^* + w \sum_1 D_1 N_1$$

The nominal value of total resources available to the household,  $I$ , equals the initial holding of money  $M^*$  plus capital income  $rK^*$ , wage income,  $w \sum_1 N_1$ , and the present value of post retirement health benefits  $\pi = w \sum_1 (D_1 - 1) N_1$  so that

$$(A25) \quad I = M^* + rK^* + w \sum_1 D_1 N_1$$

The solution to the model consists of the equilibrium conditions (A20) - (A25), the production functions (A16), the labor demand equations (A18), the capital demand equations (A19), and the definition of the price index (A4).



## Part II: Calibration of the model

The model is calibrated so that in the absence of FAS 106 it yields an allocation of labor across sectors that matches the actual allocation of labor across sectors. It is also calibrated such that in the absence of FAS 106, all nominal prices are equal to one.

Inputs to the calibration procedure:

$\eta$ , the elasticity of labor supply

$\theta$ , the elasticity of substitution between the consumption of any two goods

$\gamma$ , the share of nominal expenditure devoted to produced goods

$N_0^*$ , the initial total amount of labor to be allocated across sectors

$K^*$ , the fixed total amount of capital to be allocated across sectors

$\rho_1$ , the share of labor in total cost in sector 1

$D_1$ , the FAS 106 cost factor in sector 1 (equal to 1 in the absence of FAS 106)

$s_1^N = N_1/N^*$ , the fraction of labor employed in sector 1

In the initial calibration, all nominal prices are set equal to one

$$(B1) \quad P_i = 1, \quad i = 1, \dots, m$$

$$(B2) \quad P = 1$$

The amount of labor initially used in each sector follows directly from the fraction of the labor force employed in sector  $i$ ,  $s_1^N$ , and the total amount of labor employed,  $N_0^*$

$$(B3) \quad N_i = s_1^N N_0^* \quad i = 1, \dots, m$$

Define  $s_1^Y = P_1 Y_1 / \sum_i P_i Y_i$  to be the share of sector  $i$ 's output  $P_i Y_i$  in total output  $\sum_i P_i Y_i$ . Then using the labor demand equation (A18) and the fact that the total amount of labor employed is  $N_0^*$ , it can be shown that

$$(B4) \quad s_1^Y = (D_1 s_1^N / \rho_1) / \sum_i (D_i s_i^N / \rho_i) \quad i = 1, \dots, m$$

Using the capital demand equation (A19) and the fact that the total amount of capital used is  $K^*$ , it can be shown that

$$(B5) \quad K_i = [(1 - \rho_1) s_1^Y / \sum_i (1 - \rho_i) s_i^Y] K^* \quad i = 1, \dots, m$$

Normalize  $A_1 = 1$  so that the production function in the first sector is

$$(B6) \quad Y_1 = N_1^{\rho_1} K_1^{1-\rho_1}$$

Using  $Y_1$  from (B6), the nominal wage and the nominal rental price of capital can be determined from the first-order conditions (A18) and (A19) for sector 1 to obtain

$$(B7) \quad w = \rho_1 Y_1 P_1 / (D_1 N_1)$$

$$(B8) \quad r = (1-\rho_1) Y_1 P_1 / K_1$$

Now calculate  $\nu$  in the labor supply curve (eq. A15) as

$$(B9) \quad \nu = N_0^* (P/w)^\eta$$

To calibrate  $A_i$ ,  $i = 2, \dots, m$ , substitute the production function (A16) into the first-order condition for labor (A18) and set  $P_i = 1$  (eq. B1) to obtain

$$(B10) \quad A_i = (D_i w / \rho_i) (N_i / K_i)^{1-\rho_i} \quad i = 2, \dots, m$$

Now set all prices equal to 1 in the equilibrium condition (A23), and use (A22) to obtain

$$(B11) \quad Y_i = \alpha_i^\theta (\gamma / (1-\gamma)) M^*$$

Summing (B11) over all  $i$  we obtain

$$(B12) \quad \sum_i Y_i = (\gamma / (1-\gamma)) M^* \sum_i \alpha_i^\theta$$

Now observe that with  $P = P_i = 1$  for all  $i$ , equation (A4) implies that

$$(B13) \quad \sum_i \alpha_i^\theta = 1$$

Substituting (B13) into (B12) and rearranging yields

$$(B14) \quad M^* = ((1-\gamma)/\gamma) \sum_i Y_i$$

Finally, substituting (B14) into (B11) and recalling that when  $P_i = P = 1$ ,  $s_i^Y = Y_i / \sum Y_i$ , we obtain

$$(B15) \quad \alpha_i^\theta = s_i^Y \quad i = 1, \dots, m.$$

# **UNITED STATES TELEPHONE ASSOCIATION**

## **Analysis of Impact of SFAS 106 Costs on GNP-PI**

***Supplemental Report:  
Responses to Objections Raised  
Regarding Original Study***

***July, 1992***

The logo for Godwins, featuring the word "Godwins" in a stylized, cursive script font. The logo is positioned in the bottom right corner of the page, with a thick, dark diagonal line running from the bottom left towards the top right, passing behind the text.

***Godwins***

## INTRODUCTION

Earlier this year, Godwins submitted a report to the United States Telephone Association (USTA) analyzing the impact of SFAS 106 on the GNP-PI, and, in particular, the extent to which the GNP-PI will reflect the increase in costs experienced by the Price Cap LECs as a result of adopting the new accounting standard. This report was placed on the record with the FCC in Bell Atlantic's Tariff Transmittal filed on February 28, 1992 (Transmittal No. 497) and was also included in U.S. West's Tariff Transmittal filed on April 3, 1992 (Transmittal No. 246).

In their filings with the FCC, several organizations took exception to the findings of that report. In particular, AT&T, MCI and the Ad Hoc Telecommunications Users Committee raised several objections with regard to various aspects of the study. The USTA has asked Godwins to provide a detailed response to each of those objections.

The purpose of this Supplemental Report is to provide the USTA with those responses. We have organized our responses into three sections, corresponding to the three different types of objections raised.

While the objections raised were numerous, this material will demonstrate that none of the objections raised should cause the Commission to have any doubts regarding the soundness of the study, or the validity of the results.

Respectfully Submitted,



Peter J. Neuwirth, F.S.A., M.A.A.A.



Andrew B. Abel, Ph.D.

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SECTION I  
RESPONSE TO OBJECTIONS REGARDING OVERALL STUDY

A. Definition of Double Count

There were two objections raised with respect to the manner in which we defined the potential sources of double counting and what sort of analysis would be required to eliminate any double counting in determining the portion of the LECs' SFAS 106 costs that should qualify for exogenous treatment.

AT&T Contention - "The LEC's have failed to demonstrate that the Commission's third criteria is met. To the contrary, the LECs' requests for exogenous treatment appear to reflect certain OPEB costs that will be reflected in the GNP-PI ... The double count occurs because (i) the GNP-PI component of the PCI will increase as all firms with OPEB liabilities reflect those costs through higher prices, and (ii) the SFAS 106 accrual calculation includes the present value of future inflation. If the SFAS 106 accrual is afforded exogenous treatment, the amount of the accrual will be increased automatically in future periods due to growth in inflation expressed by the GNP-PI component of PCI.\*\* Therefore, if inflation is included in both the exogenous cost component and GNP-PI, an LEC would be compensated twice. Although the LECs recognize this problem, no carrier has met its burden of showing that it has effectively removed this double count."

Response - AT&T's description of what it considers the source of potential double counting in the LECs' request for exogenous treatment for increased costs due to SFAS 106 demonstrates some confusion as to both the double count problem and the Godwins Report. Essentially AT&T suggests that double counting may arise from two separate sources:

- (1) Increases in the PCI due to increases in the GNP-PI caused by "firms with OPEB liabilities reflect(ing) those costs through higher prices."

- (2) Automatic increases in the exogenously treated portion of SFAS 106 accrual "due to growth in inflation expressed by the GNP-PI component of PCI."

The first source of potential double count, while a valid concern, is precisely the factor that the Godwins Report directly and thoroughly addresses. The first paragraph of page 1 of the Godwins Report explicitly states this as the primary objective of the study. As will be seen in the responses to specific criticisms of the Godwins Report, no respondent has raised any issue which, upon scrutiny, casts doubt on any of the basic findings of the study. Therefore, the Commission should accept the Report's conclusions that (a) this source of double count accounts for 0.7% of the increase in costs attributable to SFAS 106, (b) another 14.5% of the increase will be recovered through a reduction in the national wage rate, and (c) the remaining 84.8% of such increase in costs will remain unrecovered unless exogenous treatment is granted on this amount.

The second alleged source of double counting simply doesn't exist, and is the result of confusion over exactly what the LECs are requesting. While it is true that the SFAS 106 expense calculation includes the present value of future inflation, and that the expense calculated under SFAS 106 can be expected to increase each year at something close to the rate of inflation, SFAS 106 expense is not what the LECs are requesting exogenous treatment on. It is the increase in expense due to the SFAS 106 accounting change that should be afforded exogenous treatment. This is an absolutely critical distinction which is missed by AT&T. Retiree medical plans were sponsored by firms before and after SFAS 106 was issued. It is only the accounting for those plans that has changed, and it is the increase in costs associated with this change in accounting that must be evaluated.

MCI Contention -  
(Page 30)

"If one were to include SFAS 106 costs through exogenous treatment, the revenues resulting from the increase in the price cap index to account for these costs would also increase each year by the GNP-PI, as adjusted for the productivity factor. The problem is that SFAS 106 costs have already been adjusted for future inflation...Therefore, the impact of medical care cost inflation has already been counted. As such the amount offered by the LEC's has been inflated to reflect future medical costs. To include these costs again within the price cap formula through exogenous treatment, and treat them by the full amount of GNP-PI which has medical inflation embedded as well is tantamount to double counting the medical care inflation rate."

Response -

This contention is virtually identical to the second "source" of double counting outlined by AT&T on page 7 of its filing with the Commission. Rather than repeat our response to that contention, we would just point out that, like AT&T, MCI seems to have failed to grasp the point that the LECs are not asking for exogenous treatment on the SFAS 106 expense, rather they are asking for exogenous treatment on that portion of the increase in expense due to the mandated accounting change, which will not already be reflected in GNP-PI increases caused by that accounting change.



## B. Avoidance of Double Count

Two respondents suggested "better" ways of determining the extent of the double count problem, and therefore "better" ways of determining the appropriate portion of SFAS 106 costs that should qualify for exogenous treatment.

AT&T Contention -  
(pp. 13 - 14)

"....The Commission should require the LEC's to use an alternative that is both a simpler and more reliable means for correcting the double count. AT&T suggests that the appropriate method for removing the double count between the SFAS 106 accrual and the GNP-PI term in the price cap formula is to remove the impact of expected changes in GNP-PI from the SFAS 106 accrual. This can be accomplished in a straightforward manner by requiring the LEC's to subtract the expected rate of change of GNP-PI from the health care inflation component in the SFAS 106 accrual. The Commission should specify the changes in GNP-PI over the SFAS 106 forecast period. Current estimates is (sic) that GNP-PI will increase approximately 4% over the long term."

Response -

That AT&T should suggest such an illogical and erroneous "solution" to the double count problem is indicative of a failure to understand the true source of any potential double counting. As discussed earlier, potential double counting is not related to the fact that SFAS 106 costs are calculated by discounting future medical inflation back to the present. As discussed on page 2 of this material, double counting will only arise to the extent that the increased costs companies will bear, as a result of the change in accounting method required by SFAS 106, will also cause an increase in GNP-PI.

The fact that the AT&T "solution" does not address the true source of potential double counting is illustrated in the following example, where the AT&T solution is shown to produce an identical exogenous adjustment in two factually different circumstances, where logic would dictate different exogenous adjustments be applied.

In the second footnote on page 13 of its filing, AT&T estimates that its "solution" of allowing exogenous treatment for SFAS 106 accruals, calculated using a medical trend rate 4% lower than the actual rate used by the LECs for their financial statements, might result in approximately 55% of a given LEC's actual SFAS 106 accrual being afforded exogenous treatment. Now let us consider two hypothetical scenarios:

- (1) Every U.S. firm, LECs and non-LECs alike, have identical demographic makeups and provide identical retiree medical benefits. Thus, in this case, presumably every U.S. firm would experience the same increase in labor costs due to SFAS 106. In addition, under this scenario, it is assumed that all labor cost increases associated with SFAS 106 are completely reflected in the GNP-PI, as companies raise their prices to recover those costs.
- (2) The LECs are the only firms subject to SFAS 106, and/or the additional costs due to the adoption of SFAS 106 costs are never reflected in the GNP-PI.

In the first scenario, it is obvious that the increased labor costs due to SFAS 106 experienced by the LECs would be fully and completely reflected in the GNP-PI (the Godwins Report, of course, demonstrates that this hypothetical situation does not exist), and thus no exogenous adjustment would be required. In fact, in this hypothetical scenario, providing any exogenous adjustment would result in a complete double count. Yet in this circumstance, the AT&T approach of allowing recovery of SFAS 106 costs, calculated using a lower trend rate (medical inflation minus 4%), would, as noted above, result in allowing exogenous treatment on 55% of SFAS 106 accruals.

Conversely, under the second scenario, the LECs should receive an exogenous adjustment equal to 100% of their increased costs due to SFAS 106, because the double count problem simply wouldn't exist. Yet in this circumstance as well, the AT&T approach would allow an exogenous adjustment for the same 55% of SFAS 106 accruals as before. This is clearly an illogical result.

One can therefore see that AT&T's suggested approach to the double count does not address the specific factors that affect the extent of double count, i.e.:

- Differences in plans between the LECs and non-LECs
- Differences between the LECs and non-LECs which will give rise to different SFAS 106 costs (e.g., demographic differences).
- Proportion of increased aggregate labor costs due to SFAS 106, that in fact is reflected in GNP-PI.

As noted, it is precisely these critical factors detailed above that are addressed completely and comprehensively in the Godwins Report.

MCI Contention -  
(Page 31)

"If the Commission does decide to afford these LECs exogenous treatment for SFAS 106 costs, this double counting must be eliminated. This can be accomplished either through the removal of medical care inflation from the GNP-PI or through the removal of medical care inflation from the SFAS 106 accruals."

Response -

While this "solution" differs slightly from AT&T's suggested "solution" (pages 13-14 of its filing) in that MCI focuses on the medical care inflation component of GNP-PI, conceptually it is very similar, and suffers from the same

fundamental flaws as the AT&T suggestion. As with AT&T, the MCI suggestion simply doesn't address the source of any potential double count. The double count does not arise from the discount of future inflation, but only from the differential impact of SFAS 106 on the LECs relative to others, and the extent to which the price cap index will allow the LECs to recover some of those additional costs, as the macroeconomic effects of the introduction of SFAS 106 are reflected in the economy as a whole. As with the AT&T solution, the MCI solution produces the same exogenous adjustment, whether in reality there is no double counting (no non-LEC firm incurs SFAS 106 costs), or complete double counting (all firms, including LECs, experience identical increases in costs due to SFAS 106, and the GNP-PI fully reflects those increased costs). This is clearly an illogical result.

SECTION II  
RESPONSE TO OBJECTIONS REGARDING ACTUARIAL ANALYSIS

A. Methodology

There were three objections raised with respect to the basic methodology employed in the actuarial analysis undertaken by Godwins.

AT&T Contention - "... the study is flawed because the government sector is not included. Although SFAS 106 does not affect the accounting practices of the government, growth in retirement health care costs for the government sector of the economy will affect the growth in GNP-PI because GNP-PI includes government SFAS 106-like OPEB expense... If OPEB-related expenses of the government were included in the analyses, the GNP-PI would be higher, and this would have the effect of reducing the amount of the LEC's SFAS 106 expense potentially eligible for exogenous recovery."

Response - AT&T's contention that the exclusion of the government sector from the analysis results in an overstatement of the amount of the LECs' SFAS 106 expense eligible for exogenous treatment is completely invalid, because it is based on a misstatement of fact. The statement that "the GNP-PI includes government SFAS 106-like OPEB expense" is simply wrong. Government entities are not subject to SFAS 106, nor are they required by the Government Accounting Standards Board (GASB) to account for retiree medical benefits on anything other than a "pay-as-you-go" basis. It must be emphasized that the critical issue is not what effect will the increase in the "pay-as-you-go" costs of retiree medical plans have on GNP-PI. (The GNP-PI will increase due to increases in "pay-as-you-go" costs, regardless of whether SFAS 106 ever becomes effective.) Rather, the critical question is what effect will there be on GNP-PI, due to the requirement that private sector employers change the way in which they account for retiree medical plans. As AT&T

itself concedes, government sector employers are not required to change their accounting for retiree medical plans, and therefore the fact that many governmental entities sponsor such plans is not relevant to the analysis. As a result, the Godwins Report considered the government sector (see page 21 of the study), and correctly excluded it from the covered population for the calculation of the increase in labor costs experienced by firms subject to SFAS 106.

**MCI Contention** -  
(Page 26)

"The USTA study uses data from only one insurance company to arrive at the cost of medical claims for the calculation of the nationwide Benefit Level Indicator."

**Response** -

The inferred intent of the MCI comment is to suggest that Godwins used "data from only one insurance company" to come up with per capita claim costs, which were then used to derive aggregate SFAS 106 costs for the U.S. as a whole. MCI has clearly failed to appreciate the validity of the data, and the limited use to which the insurance company claims data was put. In particular,

- (1) The insurance company used is, by any measure, one of the five largest Life and Health insurance carriers in the United States.
- (2) The data collected was for gross medical claims, not amounts reimbursed by company plans.
- (3) The data was sufficiently extensive to ensure that no statistical fluctuations (i.e., sampling errors) would materially affect the results.

- (4) The data was used to form a frequency and amount distribution, against which actual plan provisions of the LECs and the companies in the Godwins database were applied, to evaluate the relative benefit levels of the TELCO plans compared to those provided by other employers.
- (5) Changes in the underlying distributions derived from the insurance company data would not have had any significant effects on the ultimate result. This is because the key results of the Godwins study were related to the ratio of the GNP-BLI to TELCO-BLI, and not to the absolute value of either.

**Ad Hoc Contention** - "Finally, the Godwins Report ignores the usual uncertainty that is associated with survey results measured by calculated standard errors. As we discussed, Godwins utilized data from a survey of 830 employers who sponsor post-retirement plans and 170 employers who do not. It is a well accepted fact that data from surveys are subject to uncertainty which is usually measured by the standard error." However, these standard errors are never taken into account in the calculation of the Benefit Level Indicators (BLIs). Thus the data shown in the table on page 28 of the Godwins Report assumes that the standard deviation is zero. This is obviously incorrect. Furthermore, there is no information as to the variance or the standard deviation of the sample data so that the sensitivity of the results can be analyzed. Combined with the fatal errors discussed above, this shows a report which was designed to come to a particular conclusion favorable to the LEC's."

(ETI)  
(Page 21)

**Response** - The "standard error" for the calculation of the average Benefit Level Indicators was not shown<sup>1</sup> because in this case, the effect of the "standard error" was deemed to be

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1 Ad Hoc references page 28 of the Godwins Report. We assume that they are referring to the table shown on page 16 of the report since there is no table nor any data appearing on page 28 of the Godwins Report.

immaterial. The reason it is immaterial is that the Godwins data is not a "survey" in the traditional sense of the word (i.e., a small sample from a large universe); rather, it is a data base comprising companies that employ approximately one-half of all employees who work for companies that provide post-retirement medical benefits.

However, in the interest of completeness, we have included in Appendix A the calculation of the variance and standard deviation, which are inherent in the calculation of the average BLIs used in the Report. As can be seen from the exhibits, the standard deviation for the average pre-65 BLI is .015, while the standard deviation for the post-65 BLI is a mere .008. Had the average BLIs been one standard deviation higher than the values actually used for both the pre-65 and the post-65 BLI, the relative impact of SFAS 106 on GNP compared to TELCO would have increased from 28.3% to 29.1%. Given that the sensitivity analysis of the overall result utilized a range for this value of 17.8% to 44.5%, it is quite clear that the effect of the "standard error" referred to by ETI is immaterial.



## B. Actuarial Assumptions

There was one objection raised regarding the reasonableness of the assumptions utilized in determining the ratio of GNP-BLI to TELCO-BLI.

MCI Contention -  
(Page 28)

FN 35

"Within the USTA study, in its flawed attempt to estimate relative benefit ratio levels, the consultant utilizes turnover rates that are markedly lower than the average turnover rate. This results in inflated estimates of the OPEB liability. Like most of the assumptions used by USTA, the grounds for this are unsupported. USTA remarks that it chose this estimate because of the historical patterns of longer service life and higher average age for TELCO employees versus other employees. Unfortunately, the study does not indicate what time frame was used for this comparison, or whether the experience of the last few years, with the large amount of downsizing exhibited by the TELCO firms, has been included."

Response -

There appear to be two contentions made in MCI's comment. First, that the Godwins study did not use the "average turnover rate" for TELCO and second, that even if the average rate, based on "historical patterns of longer service life and higher average age" were used, such turnover rates would still be too low because of "the large amount of downsizing exhibited by the TELCO firms."

With respect to the first contention, the turnover rates used for TELCO (T-2) ~~are~~ the average of the rates used by the LECs in their most recent actuarial studies (generally 1990 or 1991). With respect to the second contention, downsizing through Early Retirement programs should not have ~~any~~ impact on assumed turnover rates because such turnover rates are only utilized for projecting future pre-retirement withdrawals. This should be obvious since an individual is no longer subject to the turnover rates once that individual becomes eligible for retirement.

Further, MCI seems to have misinterpreted the statement made